### Sample Curriculum: B.S. Major in Neuroscience

<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Year 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Term</strong></td>
<td><strong>Spring Term</strong></td>
<td><strong>Fall Term</strong></td>
<td><strong>Spring Term</strong></td>
</tr>
</tbody>
</table>
| General Chemistry: CHEM 1230 and CHEM 1240 or CHEM 1350  
*Prereq: High School Chem or CHEM 1090, Math 1220 or Math Placement Score of 41* | 5 or 4+1 | Organic Chemistry: CHEM 3410  
*Prereq: CHEM 1270 or 1370 and CHEM 1280 or 1380* | 5 |
| Calculus and Analytic Geometry IA: MATH 1340*  
*Prereq: C or better in Math 1280 or Math Placement Score of 61* | 3 | Organic Chemistry: CHEM 3440 and Organic Chemistry Laboratory: CHEM 3460  
*Prereq: C or better in CHEM 3410* | 3+1 |
| Introduction to Academic Writing: GSW 1110  
*Prereq: Placement Score* | 3 | Principles of Sociology: SOC 1010 | 3 |
| Concepts in Biology II: BIOL 2050 | 4 | Human Anatomy and Physiology I: BIOL 3310  
*Prereq: BIOL 1040 or BIOL 2050* | 4 |
| | | Microbiology: BIOL 3130  
*Prereq: CHEM 1230/1240 or CHEM 1350 and BIOL 2050* | 4 |
| | | | Concepts in Biology I: BIOL 2040 | 4 |

*An alternative to the two-semester calculus sequence of MATH 1340 (3 credits) and MATH 1350 (3 credits) is the one semester course, MATH 1310 (5 credits)*
<table>
<thead>
<tr>
<th>Year 3</th>
<th></th>
<th></th>
<th>Year 4</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall Term</strong></td>
<td></td>
<td></td>
<td><strong>Spring Term</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| General Biochemistry: CHEM 4450**  
*Prereq: CHEM 3440 and CHEM 3450 or CHEM 3460* | 3 | General Biochemistry: CHEM 4470**  
*Prereq: CHEM 4450* | 3 | **Fall Term** | | **Spring Term** | | **2023-24** | | **2024-25** | | **2025-26** | |
| Neurophysiology: BIOL 4180 or alternative approved BIOL/PSYC elective  
*Prereq: BIOL 2040 and BIOL 2050* | 3 | Behavioral and Neural Genetics: PSYC 3340 or alternative approved BIOL/PSYC elective  
*Prereq: PSYC 1010* | 3 | Introduction to Statistics: Math 1150 or Fundamentals of Statistics: MATH 2470 or Quantitative Methods 1: PSYC 2700  
*Prereq: C or better in MATH 1310 or MATH 1350  
Prereq: 2700: PSYC 1010 and MATH 1220* | 3-4 | Multidisciplinary Component | 3 | Animal Behavior: BIOL 4200 or alternative approved BIOL/PSYC elective  
*Prereq: BIOL 2050 and either BIOL 2040, PSYC 1010 or PSYC 2010* | 4 | Elective | 3 | BGP Arts/Humanities | 3 | International Perspective or Cultural Diversity*** | 3 | |
| College Physics I: PHYS 2010  
*Prereq: Math Placement or C or better in MATH 1200 or higher* | 5 | College Physics II: PHYS 2020  
*Prereq: PHYS 2010* | 5 | Multidisciplinary Component | 3 | Psychoneuroendocrinology: PSYC 3350 or alternative approved BIOL/PSYC elective  
*Prereq: PSYC 1010* | 3 | Elective | 3 | BGP Arts/Humanities | 3 | International Perspective or Cultural Diversity*** | 3 | |
| Independent Research, BIOL 4010 or PSYC 4900 | 1-2 | Independent Research, BIOL 4010 or PSYC 4900 | 1-2 | | | | | | | |
| **Year 4** | | | **Year 4** | | |
| **Fall Term** | | | **Spring Term** | | |
| Introduction to Statistics: Math 1150 or Fundamentals of Statistics: MATH 2470 or Quantitative Methods 1: PSYC 2700  
*Prereq: C or better in MATH 1310 or MATH 1350  
Prereq: 2700: PSYC 1010 and MATH 1220* | 3-4 | Multidisciplinary Component | 3 | Animal Behavior: BIOL 4200 or alternative approved BIOL/PSYC elective  
*Prereq: BIOL 2050 and either BIOL 2040, PSYC 1010 or PSYC 2010* | 4 | Elective | 3 | BGP Arts/Humanities | 3 | International Perspective or Cultural Diversity*** | 3 | |
| Multidisciplinary Component | 3 | Psychoneuroendocrinology: PSYC 3350 or alternative approved BIOL/PSYC elective  
*Prereq: PSYC 1010* | 3 | | | | | | | |
| International Perspective or Cultural Diversity*** | 3 | | | | | | | | | | |
**An alternative to the two-semester biochemistry sequence of CHEM 4450 (3 credits) and CHEM 4470 (3 credits) is the one semester course, CHEM 3080 (3 credits) offered in spring and summer.

***An International Perspective (IP) course and a Cultural Diversity (CD) course need to be completed. Designated courses can simultaneously fulfill the IP or CD requirement and a BGP Arts & Humanities or BGP Social Science requirement.

- A total of 122 units need to be completed for graduation.
- A foreign language requirement needs to be fulfilled either through high school credits or completion of appropriate BGSU courses. For those in the Spanish track, SPAN 2030, Intermediate Spanish for the Professions, is recommended.
- Prepharmacy students should also take ECON 2020 (Principles of Microeconomics, which can count as a Multidisciplinary Component) and Math 2320 (Calculus II).
- A foreign language requirement needs to be fulfilled either through high school credits or completion of appropriate BGSU courses. For those in the Spanish track, SPAN 2030, Intermediate Spanish for the Professions, is recommended.
- Two approved BGP courses in the Arts and Humanities need to be completed.
- Two approved BGP courses in the Social Sciences need to be completed. These requirements can be fulfilled with SOC 1010 and PSYC 1010 which should be taken for MCAT preparation.
- A total of 4 classes are needed for the multidisciplinary component. One course can include PHYS 2020, College Physics II. Another can be BIOL 3310, Two more are needed from different disciplines. One of these courses needs to be at the 3000/4000 level.
- A total of 40 units at the 3000/4000 level needs to be completed for graduation.
- The following courses should ideally be completed by the end of Year 1: GSW 1110, GSW 1120, BIOL 2050, PSYC 1010.
- The following courses should be ideally completed at minimum by the end of Year 2: BIOL 2040, MATH 1310 or MATH 1350, PHYS 2010 or PHYS 2110, PHYS 2020 or PHYS 2120, CHEM 1230 or CHEM 1350, CHEM 1270 or CHEM 1370. Foreign Language Requirement.
- The following courses should be ideally completed at minimum by the end of Year 3: BIOL 3310, BIOL 3320, CHEM 3410, CHEM 3440, CHEM 3450 or CHEM 3460, CHEM 3080 or CHEM 4470, SOC 1010.